

REMARKS

The Office Action dated June 17, 2008 has been received and carefully noted. The above amendments to the claims and the following remarks, are submitted as a full and complete response thereto.

Claims 1-12 and 26-52 are currently pending in this application, of which claims 1, 25-27, and 43-47 are independent. In particular, Applicants here amend claims 1, 2, 4, 6-8, 10, 26, and 27, cancel claims 13-25 without prejudice and disclaimer, and add new claims 28-52 to more particularly point out and distinctly claim the subject matter that the Applicants' regard as the present application. It is respectfully submitted that the amendments and claim additions add no new subject matter to the present application and serve only to place the present application in better condition for examination. Entry of the claim amendments and additions and reconsideration of the rejected pending claims are respectfully requested. It is believed that all grounds for rejection in the Office Action are currently addressed and that the present application is currently in condition for reconsideration in view of the amendment and the following arguments. Reconsideration and allowance of claims 1-12 and 26-52 are respectfully requested.

Claims 1-3, 5, 10-12, 13-15, 17 and 22-27 are rejected under 35 U.S.C. §103(a) as being allegedly obvious over U.S. Patent Publication No. 2005/0136890 (Lippelt), in view of U.S. Patent Publication No. 2003/0027549 (Kiel) and U.S. Patent No. 5,504,808 (Hamrick). The Office Action took the position that Lippelt disclosed all of the features of these claims except that the accounting client is configured to send charging update data to the accounting server during the call, and the accounting server is configured to collate the

charging update data on the basis of the accounting session identifier, thereby enabling updating of the prepaid credit during the call. The Office Action asserted that Kiel and Hamrick, respectively, disclosed these claim limitations. Applicants respectfully submit that Lippelt, Kiel, and Hamrick, taken individually or in combination, fail to disclose or suggest all of the features recited in any of the pending claims.

Claim 1, from which claims 2-12 depend, is directed to a method that includes receiving a request for ascertaining whether any costs generated by at least one accounting client in a network, which are associated with a request for establishing a call between a first terminal and a second terminal, are to be charged against prepaid credit. In the event some or all of the costs are to be charged against prepaid credit, a request for is received for establishing an accounting session between an accounting server and the at least one accounting client that will generate the costs to be charged against the prepaid credit. The accounting session is established, and an accounting session identifier is allocated to the accounting session. Charging update data is received at the accounting server from the at least one accounting client during the call established between the first and second terminals. The charging update data is collated in the accounting server based on the accounting session identifier, thereby enabling updating of the prepaid credit during the call, wherein the charging update data includes the accounting session identifier and tariff update data.

Independent claim 26, from which claims 28-35 depend, is directed to an apparatus that includes a first receiver configured to receive a request for ascertaining whether any costs are generated by at least one accounting client in a network, which are

associated with a request for establishing a call between a first terminal and a second terminal, are to be charged against prepaid credit. A second receiver in the apparatus is configured to receive a request to establish an accounting session with the at least one accounting client that will generate the costs to be charged against prepaid credit during the call. An establishing unit in the apparatus is configured to establish the accounting session and to allocate an accounting session identifier to the accounting session. A third receiver in the apparatus is configured to receive charging update data from the at least one accounting client during the call established between the first and second terminals. The apparatus further includes a collating unit configured to collate the charging update data based on the accounting session identifier, thereby enabling updating of the prepaid credit during the call, wherein the charging update data includes the accounting session identifier and tariff update data.

Independent claim 27, from which claims 36-42 depend, relates to an apparatus that includes a receiver that is configured to receive a request to establish an accounting session with an accounting server that will generate the costs to be charged against prepaid credit associated with a request for establishing a call between a first and second terminal. An establishing unit in the apparatus is configured to establish, the accounting session being allocated an accounting session identifier. The apparatus also includes a transmitter configured to send charging update data to the accounting server during the call established between the first and second terminals for collation by the accounting server based on the accounting session identifier, thereby enabling updating of the

prepaid credit during the call, wherein the charging update data includes the accounting session identifier and tariff update data.

New independent claim 43 relates a computer program embodied on a computer-readable medium configured to control a processor to perform steps, including, receiving a request for ascertaining whether any costs generated by at least one accounting client in a network, which are associated with a request for establishing a call between a first terminal and a second terminal, are to be charged against prepaid credit. In the event some or all of the costs are to be charged against prepaid credit, a request is received for establishing an accounting session between an accounting server and the accounting client that will generate the costs to be charged against the prepaid credit. The accounting session is established, and an accounting session identifier is allocated to the accounting session. Charging update data is received at the accounting server from the at least one accounting client during the call established between the first and second terminals. The charging update data is collated in the accounting server based on the accounting session identifier, thereby enabling updating of the prepaid credit during the call, wherein the charging update data includes the accounting session identifier and tariff update data.

New independent claim 44 relates to an apparatus, comprising first receiving means for receiving a request for ascertaining whether any costs are generated by at least one accounting client in a network, which are associated with a request for establishing a call between a first terminal and a second terminal, are to be charged against prepaid credit. The apparatus of claim 44 further includes second receiving means for receiving a

request to establish an accounting session with the at least one accounting client that will generate the costs to be charged against prepaid credit during the call. Establishing means in the apparatus of claim 44 establishes the accounting session and allocates an accounting session identifier to the accounting session. Third receiving means in the apparatus are for receiving charging update data from the at least one accounting client during the call established between the first and second terminals. The apparatus further includes collating means for collating the charging update data based on the accounting session identifier, thereby enabling updating of the prepaid credit during the call, wherein the charging update data includes the accounting session identifier and tariff update data.

Independent claim 45 relates to an apparatus that comprises receiving means for receiving a request to establish an accounting session with an accounting server that will generate the costs to be charged against prepaid credit associated with a request for establishing a call between a first and second terminal. The apparatus of claim 45 further includes establishing means for establishing, the accounting session being allocated an accounting session identifier. Transmitting means in the apparatus are for sending charging update data to the accounting server during the call established between the first and second terminals for collation by the accounting server based on the accounting session identifier, thereby enabling updating of the prepaid credit during the call, wherein the charging update data includes the accounting session identifier and tariff update data.

Independent claim 46 relates to a computer program embodied on a computer-readable medium configured to control a processor to receive a request to establish an accounting session with an accounting server that will generate the costs to be charged

against prepaid credit associated with a request for establishing a call between a first and second terminal. The accounting session being allocated an accounting session identifier. Charging update data being sent to the accounting server during the call established between the first and second terminals for collation by the accounting server based on the accounting session identifier, thereby enabling updating of the prepaid credit during the call, wherein the charging update data includes the accounting session identifier and tariff update data.

Independent claim 47 relates to a method that includes receiving a request to establish an accounting session with an accounting server that will generate the costs to be charged against prepaid credit associated with a request for establishing a call between a first and second terminal. The accounting session being allocated an accounting session identifier. Charging update data being sent to the accounting server during the call established between the first and second terminals for collation by the accounting server based on the accounting session identifier, thereby enabling updating of the prepaid credit during the call, wherein the charging update data includes the accounting session identifier and tariff update data.

As described in greater detail below, Lippelt, Kiel, and Hamrick, taken individually or in combination, fail to disclose or suggest all of the features recited in any of the above-described pending claims.

As described in prior responses, certain embodiments of the present invention provide for online charging of prepaid accounts with the ability to update charging data during a call. Thus, it is possible to update ongoing accounting sessions, manage online

chargeable events, or manage change in charging tariff. Advantageously, this means that post and prepaid mechanisms are distinguished and this decreases the signaling load, and the amount of logical functionality needed in the server side is decreased (see page 2, line 29 - page 3, line 19, and page 15, lines 9 - 14 of the present application).

By including the accounting session identifier in the charging update data, each accounting session has a unique identification. Thus, each accounting session can be identified and processed. For example, according to one embodiment of the present invention (e.g. see page 10, lines 2 to 6 of the present application), the charging update data is collated based on the global session ID, which allows the combining of different accounting sessions, but still permits identification of each unique accounting session. Applicants submit that each of the above claims recites features that are neither disclosed nor suggested in any of the cited references.

As discussed in previous correspondence, Lippelt discloses a charging method for a communication service, particularly a prepaid communications service, in a communications system. A prepaid service processing node (PSPN) processes a communications service. A prepayment support node (PPSC) administers a prepaid service account. A prepayment support node information (PI) is received from a subscriber profile database (SPD) and a prepayment support node address (PA) is determined from the prepayment support node information (PI). A request for the communications service to be charged on a subscribers prepayment account is detected and a credit information request is sent to the PPSC, which then responds with a credit information message.

The credit information may be a time value or a traffic volume (see Lippelt at paragraph [0026]). The credit can be deducted from the prepaid service account by the PPSC in a step wise fashion, for instance in blocks of one minute, such that the risk is minimized to an unpaid air time of one minute if the account becomes empty (see Lippelt at paragraph [0028]). Therefore, the PSPN is granted a credit value of one minute by the PPSC in response to a credit information request, and when this credit is below a certain threshold another credit information request message must be sent.

The Office Action admitted that Lippelt does not disclose sending charging update data from the accounting client to the accounting server during the call. The communications system of Lippelt operates by merely providing a credit value to the service processor PSPN which then consumes the value either in discrete steps or continuously. Specifically, Lippelt only discloses sending a message from the PSPN to the PPSC which is a credit information request message. The credit information request message does not include charging update data.

The Office Action further admitted that Lippelt does not disclose collating the charging update data in the accounting server based on the accounting session identifier, thereby enabling updating of the prepaid credit during the call. The reference parameter (RT), which is part of the credit information request message or the credit information message, is used to identify those messages and identify a charging transaction (see page 17, lines 1 to 6). Neither of these messages includes charging update data. Furthermore, since Lippelt does not send charging update data in the credit information request, neither

does Lippelt disclose providing charging update data including an accounting session identifier. Therefore, these messages cannot be used to collate the charging update data.

Thus, as discussed above, Lippelt does not disclose or suggest providing charging update data including the accounting session identifier during the call. Lippelt merely describes that the only information which is sent from the PPSC (which manages prepaid accounts of subscribers) to the PSPN (which processes prepaid services) is the credit information request message, or the credit information message. Thus, none of the parameters in the message relate to charging update data during an on-going call. As discussed above, by including the accounting session identifier in the charging update data, each accounting session has a unique identification. This means that each accounting session can be identified and processed.

Continuing with claim 1, Lippelt further fails to disclose or suggest allocating an account session identifier having established an accounting session. In discussing this limitation, the Office Action cites to Lippelt at FIG. 3 and the associated text at page 5, paragraph [0050]. Applicants respectfully urge that this and other sections of Lippelt are silent regarding the limitation of allocating an account session identifier having established an accounting session. Instead, Lippelt discloses that having received prepayment support node information (PI), the PSPN merely determines a prepayment support node address PA or a subscriber identifier. Applicants urge that the information determined in Lippelt at paragraph [0050] is not an identifier of an account session, but instead clearly references elements within the network. For example, neither the

prepayment support node address PA nor the subscriber identifier can distinguish between multiple account sessions.

Applicants further urge that as described above, Lippelt also does not disclose or suggest the limitation in claim 1 that the charging update data includes tariff update data, as described in the present application at page 14, lines 29 to 31 of the present application.

In response to the admitted deficiencies in Lippelt, the Office Action relies on Kiel and Hamrick. However, as described below, Kiel and Hamrick, either alone or in combination, fails to cure all of the above described deficiencies in Lippelt.

Kiel generally relates to applying a prepaid credit to use by a client in his communication activity as well as for managing a prepaying scheme for the client. A client's communication device, for example, wireless communication device of a cellular telephone system or a computer communicating over a computer network such as the Internet, is provided with an activity monitoring unit that holds the client's credit data and applies such credit to permit communication activity by the client through the use of the client's communication device.

Specifically , the Office Action alleged that Kiel teaches the feature of "sending charging update data from the accounting client to accounting server" and refers to Kiel at paragraphs [0033] to [0036]. However, Applicants have carefully reviewed this and others sections in Kiel and respectfully urge that this reference does not teach or suggest sending charging update data in this passage. Instead, Kiel discloses a method of monitoring a prepayment account which is then continuously debited in real time for the

client's communication activity. Kiel teaches away from transmitting charging update data from an accounting client to an accounting server, because Kiel discloses updating a credit data record locally having received a copy of the original credit data record (*See, e.g.*, Kiel at paragraph [0036]). Applicants therefore submit that there is no other reason to transfer a copy of the client data record unless it is updated locally.

Furthermore, Applicants urge that Kiel does not disclose or suggest sending tariff update data because the billing rules are stored in the monitoring unit 116. For example, Kiel also does not disclose or suggest that the billing rules change, and therefore there is no reason in Kiel to update the billing rule in "real time" as recited, for example, in claim 1. In this way, there is no suggestion in Kiel that tariff update data is sent during a call. Therefore, further Kiel fails to disclose the feature of the charging update data including tariff update data.

The Office Action cites to Hamrick as allegedly disclosing the limitation of collating the charging update data in the accounting server based on the accounting session identifier.

Hamrick discloses prepaid telephone cards on which identifying indicia are disposed on the telephone debit card surface, and temporarily covered so that it cannot be visually or photographically detected. After purchase of a debit card from a distribution terminal or device, a user is able to remove the temporary covering and access a telephone service system by first accessing a central system server and communicating to such central system server the now revealed identifying indicia on the purchase card. The central system server monitors the duration of a user's telephone usage, and charges an

appropriate associated toll against the debit card's predetermined debit limit. Separate toll rates may be applied for different forms of calls, for example, interstate long distance, intrastate long distance, local, or even collect or conference calling, or modem service. Use of a central system server can open the system to providing additional options or user services, such as gaming procedures involving gaming indicia optionally disposed on the debit card surface and, if desired, access to a central gaming system. Additionally, provisions may be made for a user to access an electronic voice mail system through the central system server.

As an initial matter, Applicants note that Hamrick is in a completely different field to that of the present invention. Specifically, Hamrick relates to charging mobile telephone prepay accounts, whereas the present application relates to, for example, disposable debit card system. Therefore a person with ordinary skill in the field of communications would not even consider Hamrick in combination with Lippelt and Kiel. Therefore, this rejection is legally improper 35 U.S.C. §103(a) (See, for example, MPEP-§2141 that requires references to be in similar technical fields for a proper rejection under 35 U.S.C. §103(a)). Applicants also submit that there is no teaching, suggestion, or incentive supporting the cited combination of references except to wrongfully recreate the present invention using improper hindsight.

Applicants further urge that the need of the Office Action to reference three or more separate references in each of the rejections is *per se* evidence that the recited embodiments are not patentably obvious. Specifically, it is well established in United States patent law that a piecemeal analysis of a number of references, to extract a number

of individual elements which are picked and chosen to recreate the claimed invention, is improper absent some teaching or suggestion in the references to support their use in the particular claimed combination. It is improper to look to the applicants' own disclosure for any such motivation or incentive (Interconnect Planning Corp. v. Feil, 227 USPQ 543 (CAFC 1985), Symbol Technologies Inc. v. Opticon, Inc., 19 USPQ 2d 1241 (CAFC 1991), In re Rothermel and Wadell, 125 USPQ 328 (CCPA 1960), In re Jones, 21 2d 1941 (CAFC 1992)).

Furthermore, if such a combination was to be made as proposed in the Office Action, there is no disclosure nor suggestion of the claimed invention. In re Glass, 176 USPQ 49 (CCPA 1973), citing In Chandler, 117 USPQ 361 (CCPA 1958), held that it is error to ignore specific limitations of a claimed invention which distinguish over a cited reference or references. Applicants respectfully submit, therefore, that the invention as recited in the pending claims includes specific limitations which are not shown in the cited combination of references. For example, as described above, Hamrick also does not disclose or suggest sending charging update data comprising tariff update data. Therefore, Applicants urge that none of cited references disclose the limitation from claim 1 of sending charging update data, including tariff update data during a call.

In summary, embodiments of the present invention provide for online charging or prepaid accounts with the ability to update charging data during a call. In this way, the certain embodiments of the present invention enable ongoing account sessions to be updated, online chargeable events to be managed, and changes in charging tariffs to be managed. Advantageously, post and prepaid mechanism may be distinguished to

decrease the signalling load and the amount of logical functionality needed in the server side (see page 2, lines 29 to page 3, line 19 and page 15, lines 9 to 14 of the present application). None of these technical challenges are addressed in Lippelt, Kiel, and/or Hamrick.

For at least the reasons provided above, claim 1 is allowable over Lippelt, Kiel, and Hamrick individually or in combination. Likewise, claims 26-27, although patentably distinct, likewise recites similar limitations such as sending charging update data, including tariff update data during a call, are likewise allowable on similar basis. Applicants further submit that because claims 2-3, 5, 10-12, 28-42, and 48-49 depend from claims 1, 26, or 27, these claims are allowable at least for the same reasons , as well as for the additional features recited in these dependent claims. Accordingly, withdrawal of the rejection under 35 U.S.C. 103(a) is respectfully requested.

Applicants further urge that new claims 43-47 and 50-52 are likewise allowable on similar basis and are fully supported in the present application. Applicants note, for example, that various embodiments of the present application are implement with an accounting server 37, as depicted in FIG. 1, and a “server” by definition includes tangible memory.

The Office Action further rejected claims 4 and 16 under 35 U.S.C. 103(a) as being obvious over Lippelt, Kiel, and Hamrick, in further view of US Patent No. 6,496,690 (Cobo). The Office Action took the position that Lippelt, Kiel, and Hamrick disclosed all of the features of these claims except that the accounting client is one of SGSN/GGSN, S-CSCF/P-CSCF and a network application server, but that that Cobo

disclosed this feature. Applicants submit that the cited references taken individually or in combination, fail to disclose or suggest all of the features recited in any of the above claims. Specifically, Lippelt, Kiel, and Hamrick are deficient at least for the same reasons discussed above, and Cobo fails to cure these deficiencies.

As described in Applicants' prior submissions, Cobo is directed to providing pre-paid subscriber service to a mobile subscriber in an integrated wireless network having a circuit-switched portion and a packet-switched portion. A prepaid subscriber class is sent to a SGSN, or to a GGSN when the packet-switched portion registers with the network. See col. 4 lines 65 - col. 5 line 16. However, Applicants respectfully submit that Cobo fails to cure the significant deficiencies of Lippelt, Kiel, and Hamrick discussed above.

Based at least on the above, Applicants respectfully submit that the cited references fail to disclose or suggest all of the features recited in claim 4. Accordingly, withdrawal of the rejection under 35 U.S.C. 103(a) is respectfully requested.

The Office Action further rejected claims 6-9 and 18-21 under 35 U.S.C. 103(a) as being obvious over Lippelt, Kiel, and Hamrick, in further view of US Patent No. 6,947,724 to Chaney (Chaney). The Office Action took the position that Lippelt, Kiel, and Hamrick, disclosed all of the features of these claims except establishment of the call is made via a session initiation protocol (SIP), but Chaney disclosed this feature. Applicants respectfully submit that the cited references fail to disclose or suggest all of the features recited in any of the above claims. Specifically, Lippelt, Kiel, and Hamrick

are deficient at least for the reasons discussed above, and Chaney fails to cure these deficiencies.

As described in Applicants' prior Response, Chaney is directed to billing a call placed by a user, based on the reported traffic load. According to Chaney, in a SIP network, users register their existence on a sub-network through a Call State Control Function (CSCF). Each user has a SIP ID which is an address which follows the user to different terminals. According to one example, when a user sits at his office desk he/she can register as being at this desk. The desk phone then sends a SIP REGISTER message with the user's SIP ID to the CSCF, so that the user's calls can be routed. However, Applicants respectfully submit that Chaney fails to cure the significant deficiencies of Lippelt, Kiel, and Hamrick discussed above.

Based at least on the above, Applicants respectfully submit that the cited references fail to disclose or suggest all of the features recited in claims 6-9. Accordingly, withdrawal of the rejection under 35 U.S.C. 103(a) is respectfully requested.

Applicants therefore respectfully submit that each of claims 1-12 and 26-52 recites features that are neither disclosed nor suggested in any of the cited references. Accordingly, it is respectfully requested that claims 1-12 and 26-52 be allowed, and this application be passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicants' undersigned representative at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, Applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



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